

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. - 34. (cancelled)

35. (currently amended) An apparatus of electroforming tissue comprising:

means for creating stress in the tissue to temporally define and maintain a predetermined shape of the tissue; and

means for causing a current to flow in the tissue while the created stress is present to permanently change shape of the tissue or material parameters of the tissue without necrosis or ablation.

36. (original) The apparatus of claim 35 where the means for causing a current to flow in the tissue comprises means for causing a direct current of a predetermined polarity to flow in the tissue to mediate the tissue.

37. (currently amended) The apparatus of claim 35 where the means for creating stress in the tissue comprises means for mechanically applying force to the tissue to create external stresses applied to the tissue to temporally define and maintain a predetermined shape of the tissue.

38. (currently amended) The apparatus of claim 35 where the means for creating stress in the tissue comprises means for changing material parameters of the tissue to create internal stresses in the tissue to permanently change its shape to the predetermined shape.

39. (currently amended) The apparatus of claim 38 where the means for changing material parameters of the tissue comprises means for causing a direct current to flow in the tissue.

40. (original) The apparatus of claim 35 further means for comprising monitoring the stresses in the tissue and means for controlling the current flowing in the tissue according to the stresses therein.

41. - 45. (cancelled) .

46. (original) The apparatus of claim 40 where the means for monitoring the stresses in the tissue comprises means for monitoring color of the tissue as caused by a chemical dye disposed therein.

47. (original) The apparatus of claim 40 where the means for monitoring the stresses in the tissue comprises means for monitoring color of the tissue as caused by electroplating a material thereon.

48. (cancelled)

49. (currently amended) The apparatus of claim 48 35 where the means for causing a current to flow in the tissue comprises ~~where the means for applying a current of predetermined polarity to obtain a predetermined bioeffect comprises means for~~ applying voltage pulses of the same polarity to form a DC pulse train.

50. (original) The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for applying a first sequence of voltage pulses of the same polarity and means for applying a second sequence of voltage pulses of the opposite polarity to form a complex DC pulse train.

51. (original) The apparatus of claim 50 where the means for applying a first sequence and means for applying a second sequence of voltage pulses provide a net charge cancellation when integrated over an application time.

52. (currently amended) The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for flowing direct current from a positive electrode to obtain tissue compression in the proximity of the positive electrode.

53. (currently amended) The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for flowing direct current from a negative electrode to obtain tissue lengthening in the proximity of the negative electrode.

54. (original) The apparatus of claim 35 where the means for creating stress in the tissue comprises creating means for tension, compression, shear or combinations thereof in the tissue.

55. (original) The apparatus of claim 35 where the means for causing a current to flow in the tissue comprises means for applying a DC voltage for a predetermined application time across two paired conductive elements in contact with the tissue.

56. (currently amended) The apparatus of claim 55 where the means for applying a DC voltage for a predetermined application time across two paired conductive elements comprises means for placing a solid conductive element in contact with the tissue, ~~including solid conductive elements composed of metals or conductive polymers.~~

57. – 73. (cancelled)